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MASS **HIGHWAY**

Bureau of Transportation Planning and Development
Data Resources Section

Geographical Information System
Map and Data Products Catalog
2004

GOVERNMENT DOCUMENTS
COLLECTION

NOV 0 2 2004

University of Massachusetts
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December 2003

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Geographical Information System Map and Data Products Catalog

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Introduction

“GIS is information about your world, represented by points, lines and polygons, for a range of geography explored with a computer.”

“GIS takes geographically referenced numbers and words from rows and columns in a database or spreadsheet and summarizes them on a map as points, lines or polygons.”

The maps and data described in this catalog are available from the Bureau of Transportation Planning and Development (Planning). Any product listed in this catalog can be obtained by filling out a data request form (Appendix A). Three categories of standard products are available: Geographic Information System (GIS) paper maps, GIS and database digital data and road inventory printouts. Each of these products is described in this catalog.

Please note this catalog's date. Because the number of available products is constantly being expanded to reflect new products, please make sure that you have the most recent catalog. Copies of the catalog can be obtained from:

Data Resource Manager
Bureau of Transportation Planning and Development
10 Park Plaza, Room 4150
Boston, MA 02116-3973
Telephone: (617) 973-7340
E-Mail: mark.berger@state.ma.us

MassHighway Road Inventory File

Most maps generated by Planning's GIS system use roads as a basic component. This information is based on the Road Inventory file, which serves as the foundation of Planning's GIS capabilities. The Road Inventory is linked to 1:5,000 Centerline files using ArcGIS, and contains approximately 149,400 road inventory records, 107,000 street names, and 356,000 arcs, representing over 35,400 centerline miles of roadway. This GIS system allows for mapping of attributes in the Road Inventory file at any geographic level (i.e., state, MassHighway District, etc.). Appendix B contains a list of all the road inventory attributes.

The Road Inventory file is constantly being updated with information obtained from internal MassHighway sources and from cities and towns.

Sources and Disclaimer

Many of the map products described in this catalog show data obtained from MassGIS, the clearinghouse for all spatial data developed or maintained by the various Massachusetts state agencies. Base map features including ponds, streams, coastline, and town boundaries originated from MassGIS and the USGS digital line graphs originally digitized at 1:100,000 scale. Road attribute data is

derived from the Road Inventory File maintained by Planning. The Road Inventory data is constantly being updated, with the assistance of Massachusetts' cities and towns, and does not constitute a legal record. The location of features and boundaries shown on these maps are approximate and are intended for planning purposes only. These maps are not intended for survey, engineering, or legal purposes. Appendix C contains a comprehensive list of available GIS coverages.

GIS Services Available to EOTC and MassHighway

Interest in spatial data viewing and map-making is increasing rapidly within the Executive Office of Transportation and Construction (EOTC) and Massachusetts Highway Department (MassHighway). The Bureau of Transportation Planning and Development (Planning) is supporting this interest by offering GIS services to all of EOTC and MassHighway. This support will enhance the development and exchange of spatially related databases throughout the various parts of EOTC and MassHighway.

The Data Resources section can provide advice on GIS software issues, correct cartographic form, and effective database design. The full range of the services available is described more fully below:

- Connection to the GIS server. Direct access can be provided to Planning's GIS server that contains the Road Inventory file, the digital orthophotos, and data layers from MassGIS. For the data to be at your fingertips ask us for a connection.
- Installation of GIS software. Installation of ArcGIS, flexible and user-friendly GIS software, can be arranged to enable queries and mapping of your data or with data from Planning's GIS server.
- Software support. Planning offers troubleshooting and "help-desk" capabilities for ArcGIS to support their continuing use within MassHighway.
- Customized mapping. Using ArcGIS, Planning's will develop maps for your public presentations, working maps for preliminary analyses, or field assessments. Data can be displayed in relation to an orthophoto, the Road Inventory, or other landscape features of your choice.
- Database design and programming. Sophisticated use of GIS requires an understanding of database design and programming techniques. Planning should be consulted for database design and programming issues related to the development of spatial data.

Data Resources Section Overview

The Data Resources Section provides the Massachusetts Highway Department (MassHighway) with all of its geographic information system (GIS) needs, which include creating and maintaining statewide spatial databases, preparing official MassHighway maps, conducting spatial analysis, and locating MassHighway's assets.

Road Inventory

The Data Resources Section creates and maintains the official statewide road inventory database, used by MassHighway, all Massachusetts agencies that use GIS, all Massachusetts Regional Planning Agencies, and all Massachusetts cities and towns. This database is also used for reporting annual roadway statistics to the Federal Highway Administration for funding of non-central artery statewide projects and for determining the Chapter 90 money allocation based on road mileage. The Data Resources Section maintains the accuracy of the road inventory database by continually updating the spatial linework representing the statewide roadway network and associated data.

Other Spatial Data

The Data Resources Section creates and maintains other spatial databases used by MassHighway and the entire Massachusetts GIS community. These spatial databases include the statewide rail network; bridge locations; bicycle, park-and-ride, adopt-a-highway, and rest area locations; MassHighway depot, district, and traffic count facilities; construction, design, environmental, and planning projects; and multimodal terminals, airports, seaports, and ferry routes. These spatial databases provide a tool for MassHighway to track projects and assets, which serve as an important component for transportation planning activities in the Commonwealth.

Federal Aid Program

current as of November 2003

Description

These maps depict roadways that are eligible for Federal Funding, under both the National Highway System (NHS) and Surface Transportation Program. The Surface Transportation Program includes all urban arterials, urban collectors, rural arterials, and rural major collectors that are not on the NHS. Rural minor collectors are not eligible for STP funding unless they were part of a Federal-Aid system prior to 1991 ("grand fathered" roads). Please note that these maps do not depict these "grand fathered" roads.

Other Features Included

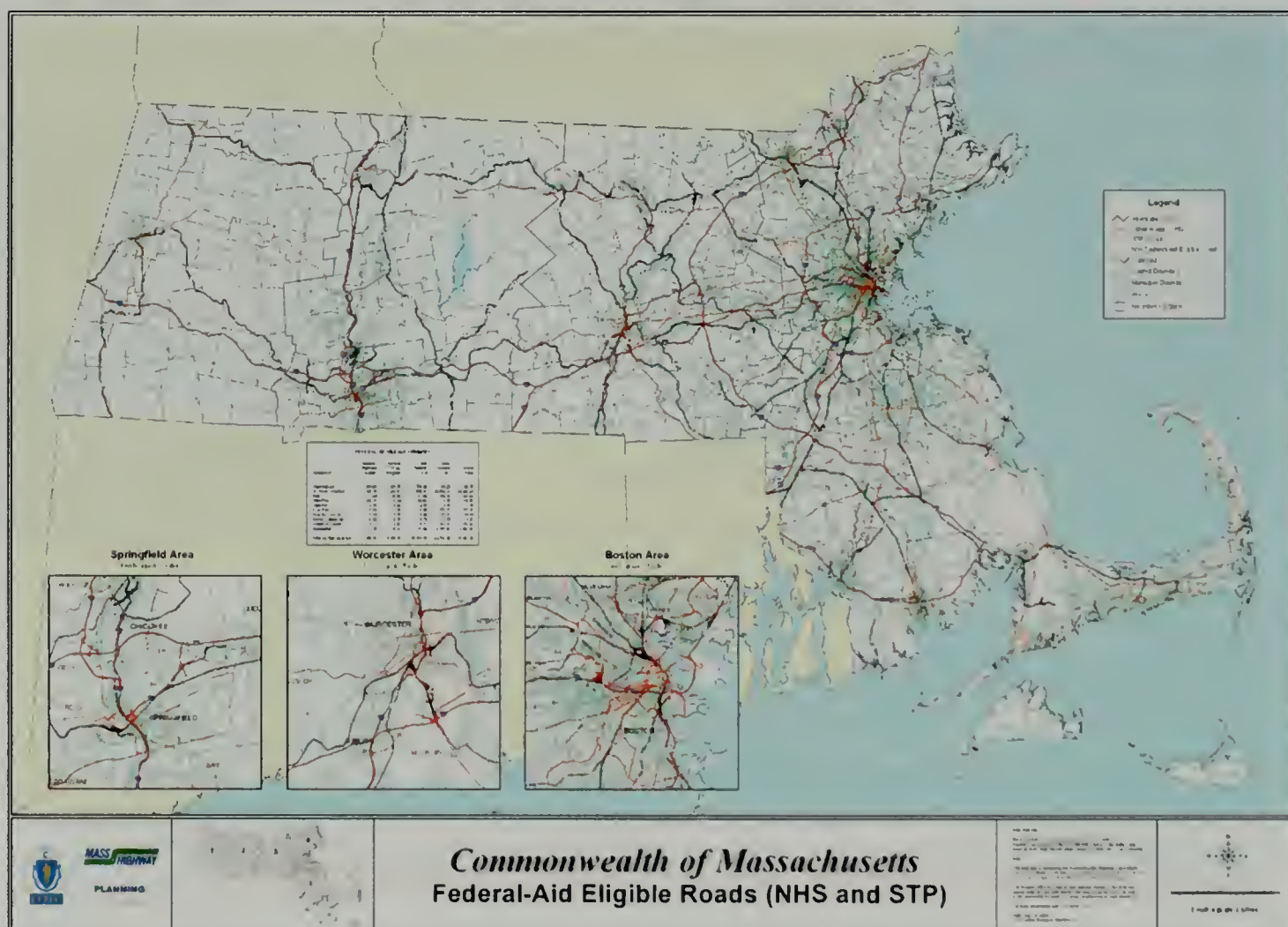
- Railroads
- MassHighway District boundaries
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide
- MassHighway District
- Town (Available February 2004)

Scale

1 inch = 4 miles
varies by district
varies by town



Functional Classification

current as of November 2003

Description

These maps depict roadways color-coded according to their functional classification (arterial, collector, local). The functional classification of a roadway refers to the character of services that it is intended to provide. In general, roads either serve to provide mobility or access for vehicles to locations. Planning developed the functional classification system in 1993 in cooperation with the Metropolitan Planning Organizations and in accordance with Section 1006(c) of the Intermodal Surface Transportation Efficiency Act. Planning maintains the functional classification system on an ongoing basis.

Functional classification divides roadways into the following three general categories:

Arterials: Arterials provide the highest level of mobility at the greatest vehicular speed for the longest uninterrupted distances and are not intended to provide access to specific locations. Arterials are further subdivided into Principal Arterials and Minor Arterials. Interstates are considered to be arterials but are given their own category in these maps.

Collectors: Collectors provide some level of both mobility and access. They collect traffic from local roads and funnel it to arterials. In rural areas, collectors are further subdivided into Major Collectors and Minor Collectors.

Local roads: Local roads provide access to abutting land with little or no emphasis on mobility. The term "local road" should not be confused with local jurisdiction. Most, though not all, functionally classified local roads are under city or town jurisdiction.

Other Features Included

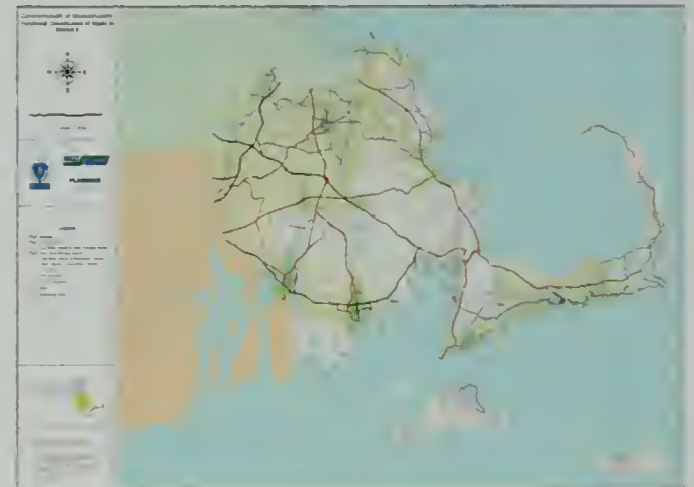
- Municipal boundaries
- Urbanized area boundaries
- Railroads (except on statewide maps)
- Ponds and streams
- MassHighway District boundaries

Geographic Areas Available

- Statewide (Arterials and Collectors)
- Town (**Available February 2004**)
- MassHighway District

Scale

1 inch = 4 miles
varies by town
varies by district



Jurisdiction of Roads

current as of November 2003

Description

These maps depict roadways color-coded according to their jurisdiction. The jurisdiction of a roadway refers to the agency that owns it and has responsibility for its repair and maintenance. The source for the jurisdiction data is the Road Inventory file that contains the following 16 jurisdictional categories:

- | | |
|--------------------------------------|--------------------------------------|
| 1. MassHighway | 9. Federal institutional |
| 2. City or town accepted | 10. County institutional |
| 3. Massachusetts District Commission | 11. State college or university |
| 4. Massachusetts Turnpike Authority | 12. Corps of Engineers |
| 5. Massachusetts Port Authority | 13. Federal Bureau of Indian Affairs |
| 6. State park or forest | 14. Department of Defense |
| 7. State institutional | 15. Other federal |
| 8. Federal park or forest | 16. Unaccepted |

Other Features Included

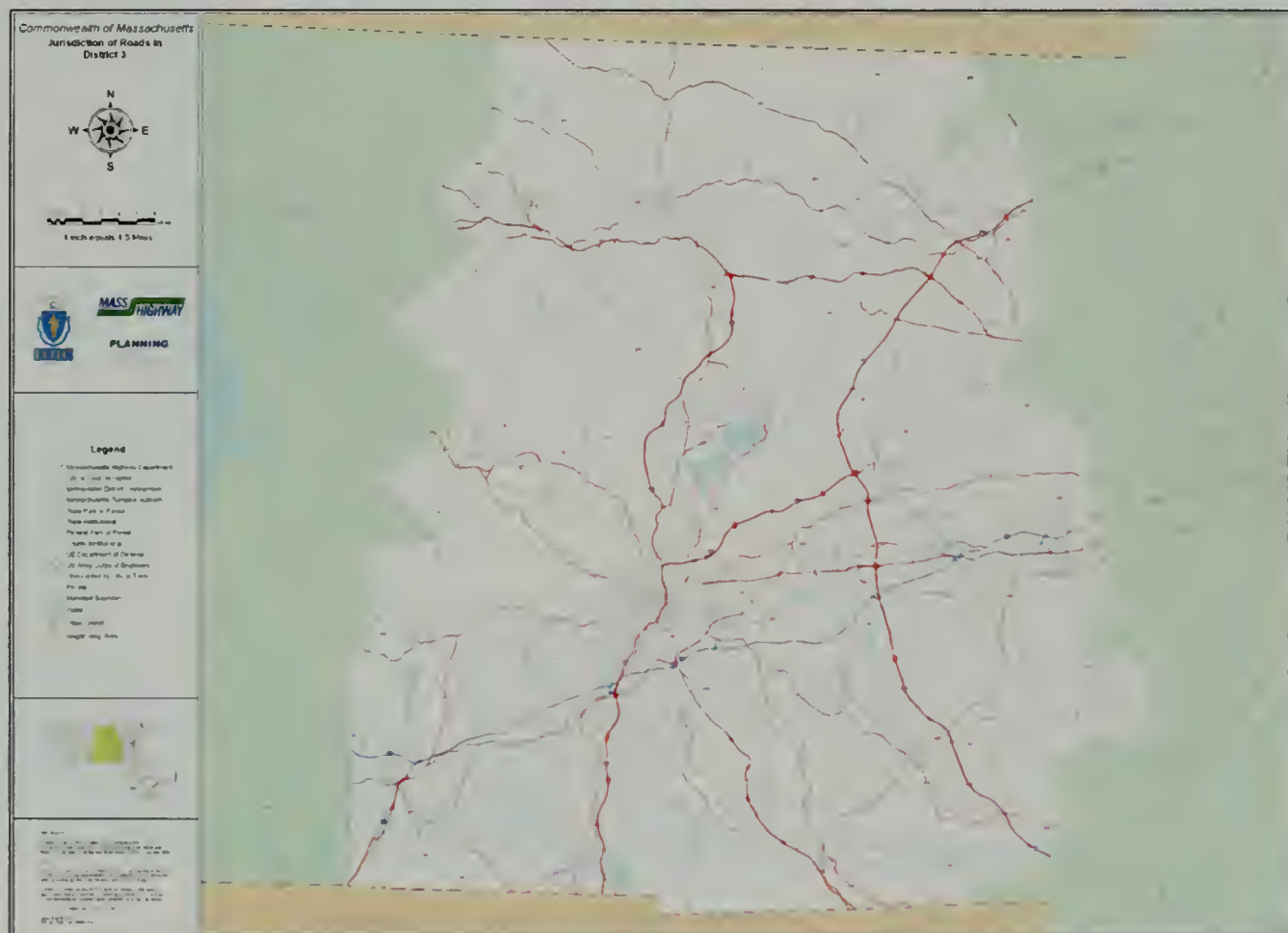
- MassHighway District boundaries
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide
- MassHighway District
- Town (Available February 2004)

Scale

1 inch = 4 miles
varies by district
varies by town



National Highway System

current as of November 2003

Description

The National Highway System (NHS) is a network of nationally significant highways selected by the state and Metropolitan Planning Organizations and approved by Congress to ensure continuity across state lines and connection with other priority transportation networks. It includes the Interstate System, Strategic Defense Highway System, other principal arterials, and connectors to major intermodal terminals. The roadways are color-coded according to subcategories of the NHS and also depict all other non-NHS arterials and collectors for reference.

Other Features Included

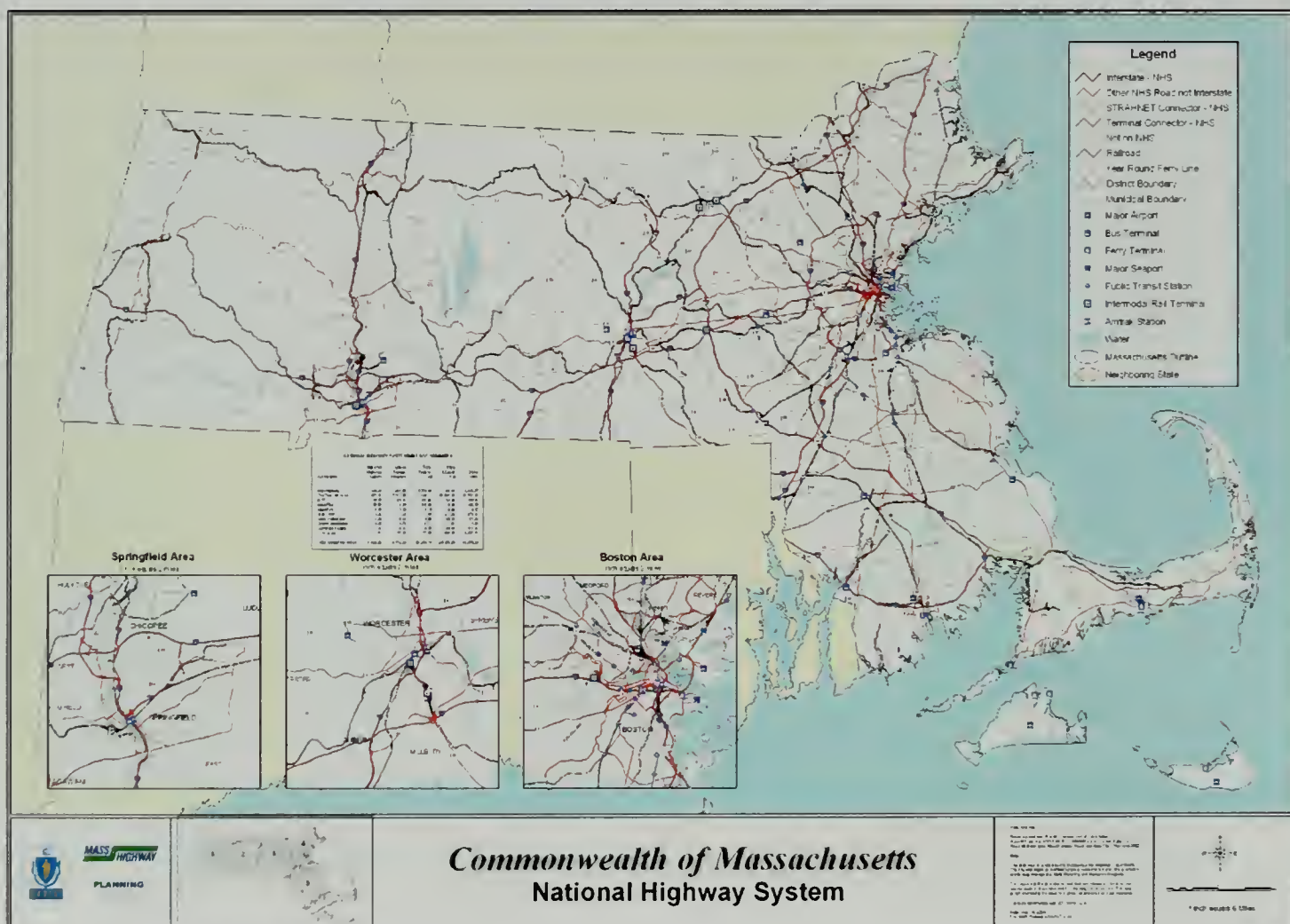
- Major intermodal terminals
- Year Round Ferry lines
- Railroads
- MassHighway District boundaries
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide
- Town (Available February 2004)
- MassHighway District

Scale

1 inch = 4 miles
varies by town
varies by district



Active Construction Projects

current as of February 2003

Description

These maps depict MassHighway construction projects that are currently active. Each project mapped has a label identifying the contract number, project location, and the type of work to be done. Examples of project types include resurfacing, bridge replacement / rehabilitation, road construction / reconstruction, traffic safety improvements, facilities repair / construction, demolition, and landscaping. Projects that are regional in scope as apposed to site specific are listed in tabular form. This map is updated on a quarterly basis using data supplied by the Construction Division in the Boston office.

Other Features Included

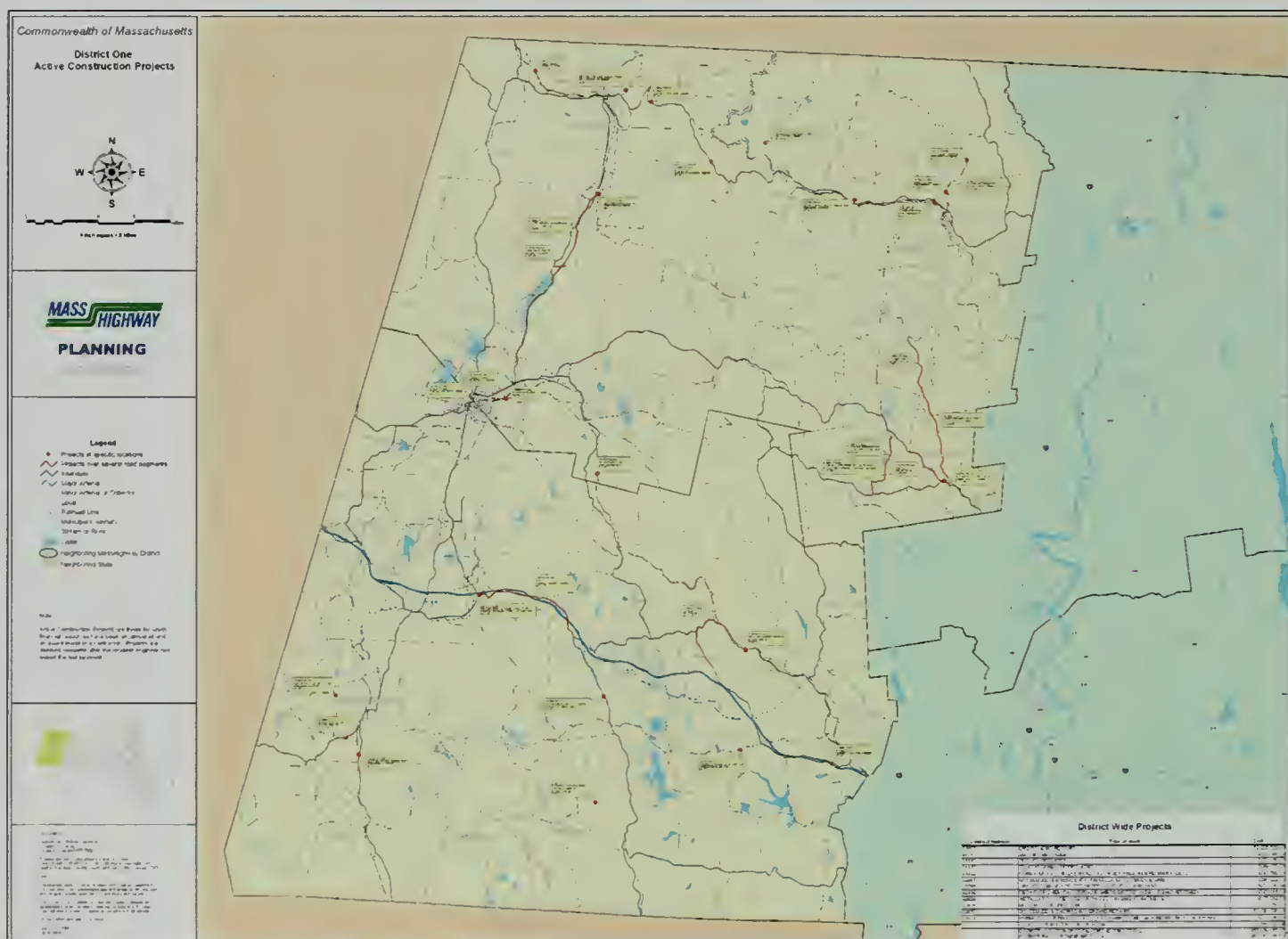
- Major Roadways
- Railroads
- MassHighway District boundaries
- Municipal boundaries
- Streams and ponds

Geographic Areas Available

- MassHighway District

Scale

varies by district



Adopt-A-Highway

current as of November 2003

Description



These maps show Adopt-A-Highway and Adopt-A-Visibility Site locations along state highways that have been assigned to participating groups for litter control. Each location is posted with the group ID, group name, and highway mile points. Sponsor-A-Highway locations, a privatized version of the Adopt-A-Highway program, are also shown on the maps. This map is updated on a quarterly basis, except during the winter.

Other Features Included

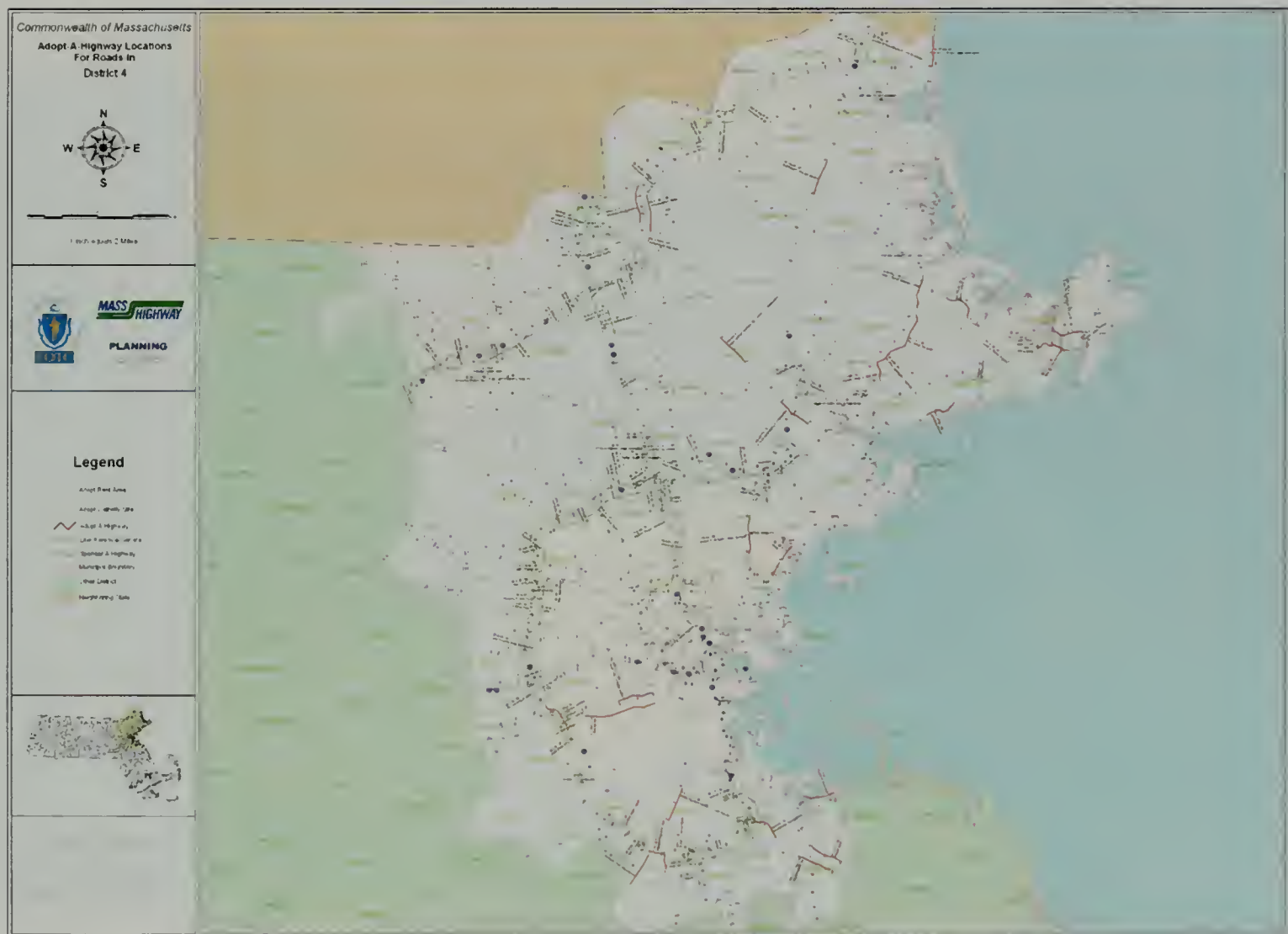
- Major Roadways, with mile markers
- Municipal boundaries
- MassHighway District boundaries

Geographic Areas Available

- MassHighway District

Scale

varies by district



Agency Boundaries

current as of May 2003

MassHighway Districts

Description

This map depicts the boundaries of the MassHighway Districts within Massachusetts as well as the District Office locations:

- District 1 – Lenox office
- District 2 – Northampton office
- District 3 – Worcester office
- District 4 – Arlington office
- District 5 – Taunton office

Other Features Included

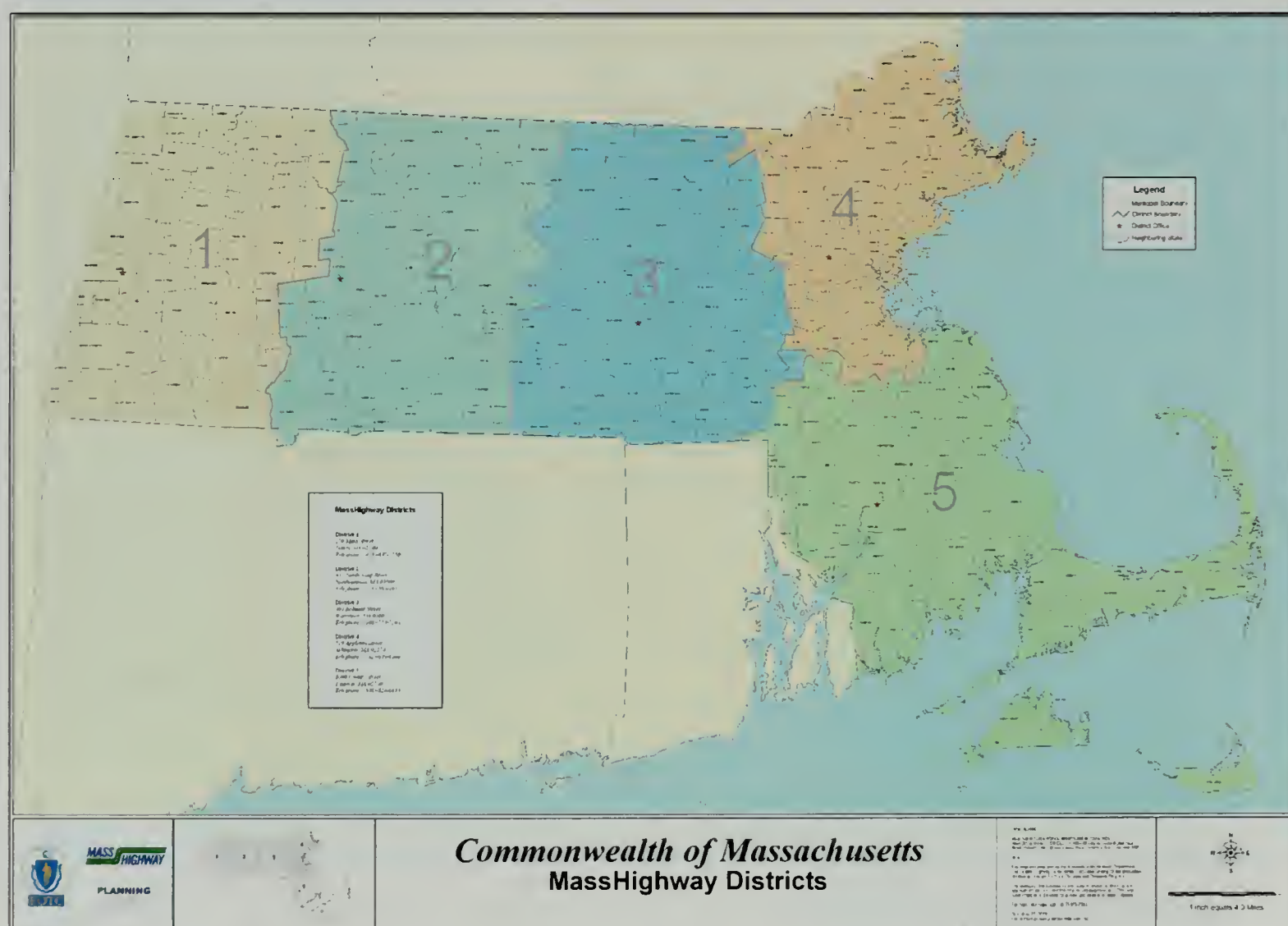
- Municipal boundaries

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles



Passenger Multimodal Transportation System

Description

This map depicts the statewide passenger multimodal transportation system consisting of park-and-ride lots (transfer points between automobile and bus), MBTA lots (transfer point between automobile and rail), bus network, and rail passenger rail network. Also depicted on the map is the ownership of park-and-ride lots.

Other Features Included

- Major Roadways
- Municipal boundaries
- Ponds and Streams

Geographic Areas Available

- Statewide

Scale

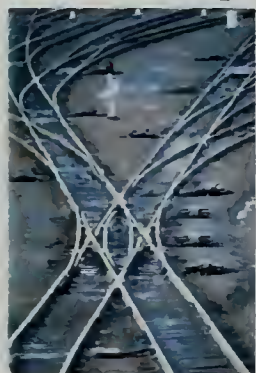
scale: 1" = 4 miles

COMING SOON

Railroad Ownership

current as of May 2003

Description



This map shows the locations of rail lines throughout Massachusetts, along with their operational and ownership status. The operational type includes (active, inactive, abandoned, or recreational) while the ownership of rail lines shows EOTC, MBTA, Amtrak, and 16 other public and privately owned railroad companies. Interstate highways are included for reference.

Other Features Included

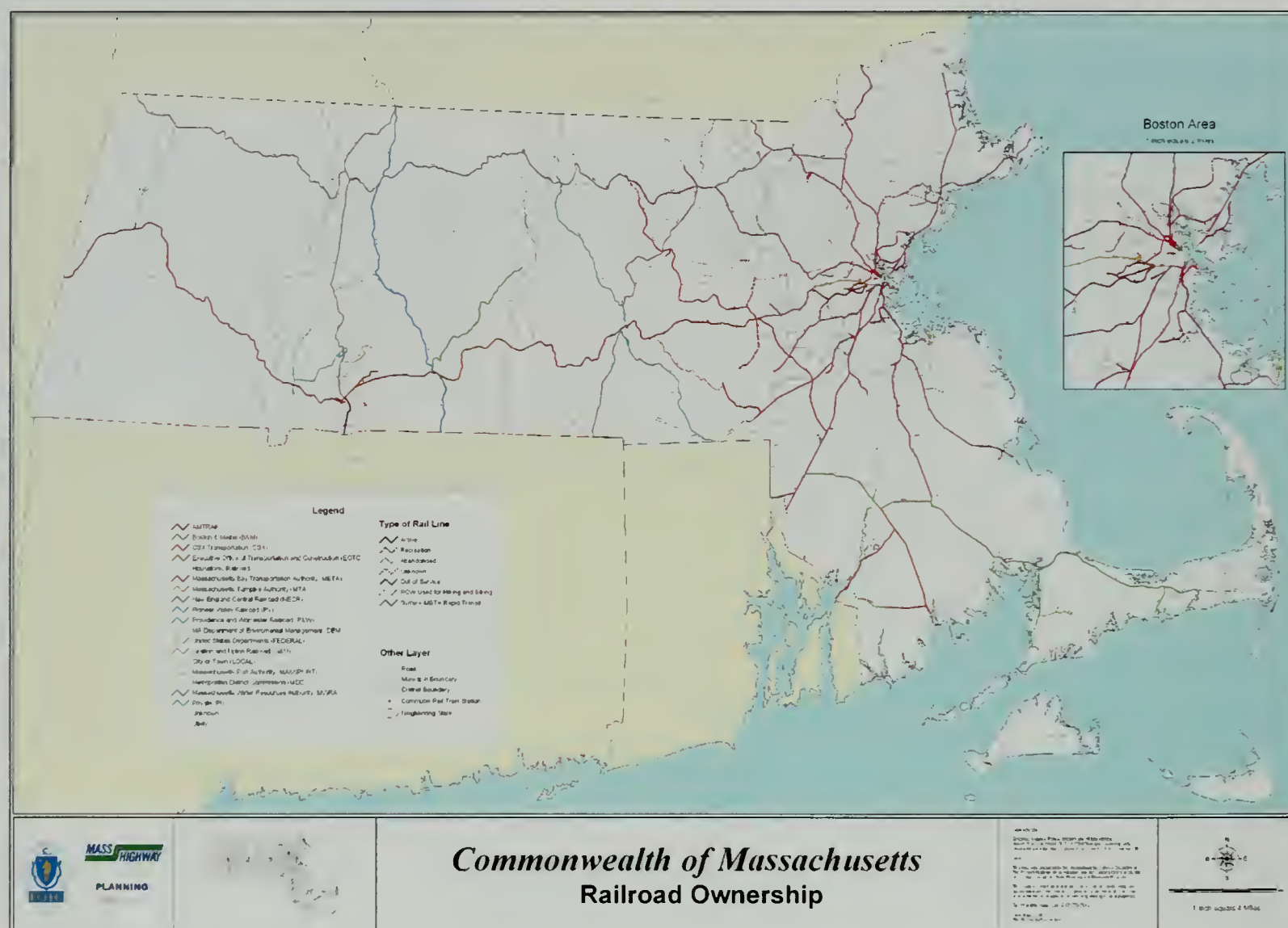
- Major Roadways
- MassHighway District boundaries
- Municipal boundaries
- Commuter Rail Train Stations

Geographic Areas Available

- Statewide

Scale

scale: 1 inch = 4 miles



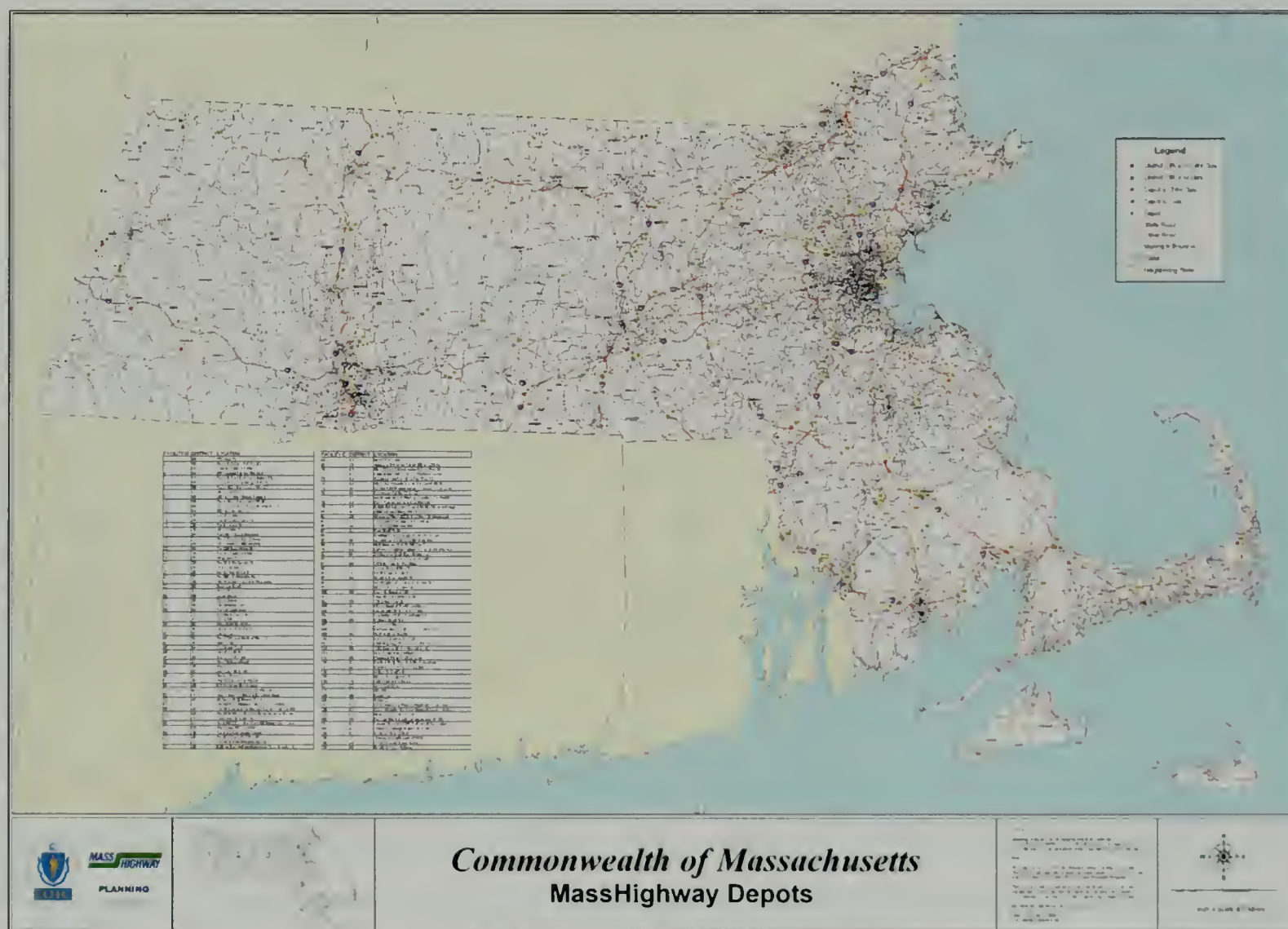
current as of November 2003

This data map shows active MassHighway depot locations. On the map, a point depicts each depot location with its associated facility ID number. The ID number is repeated in a table of attribute information listing the sub-district of the depot and a textual description of the location. In addition, the maps shows depots with fuel availability and whether the fueling stations are open weekdays or 24 hours.

- Major Roadways
- MassHighway Sub-District boundaries
- Municipal boundaries

- Statewide
- MassHighway District

1 inch = 4 miles
varies by district



Intermodal Transportation

current as of May 2003

Description

This map highlights the Massachusetts freight and passenger intermodal network. The first map (upper left) shows the active freight rail lines and statewide intermodal terminal network including major ports, airports, and rail terminals. The second map (upper right) shows the active passenger rail lines and passenger terminals including airports, train stations, and cruise terminals. The third map (lower left) shows the active freight rail lines and their ownership. The fourth map (lower right) shows the major highway network and airports.

Other Features Included

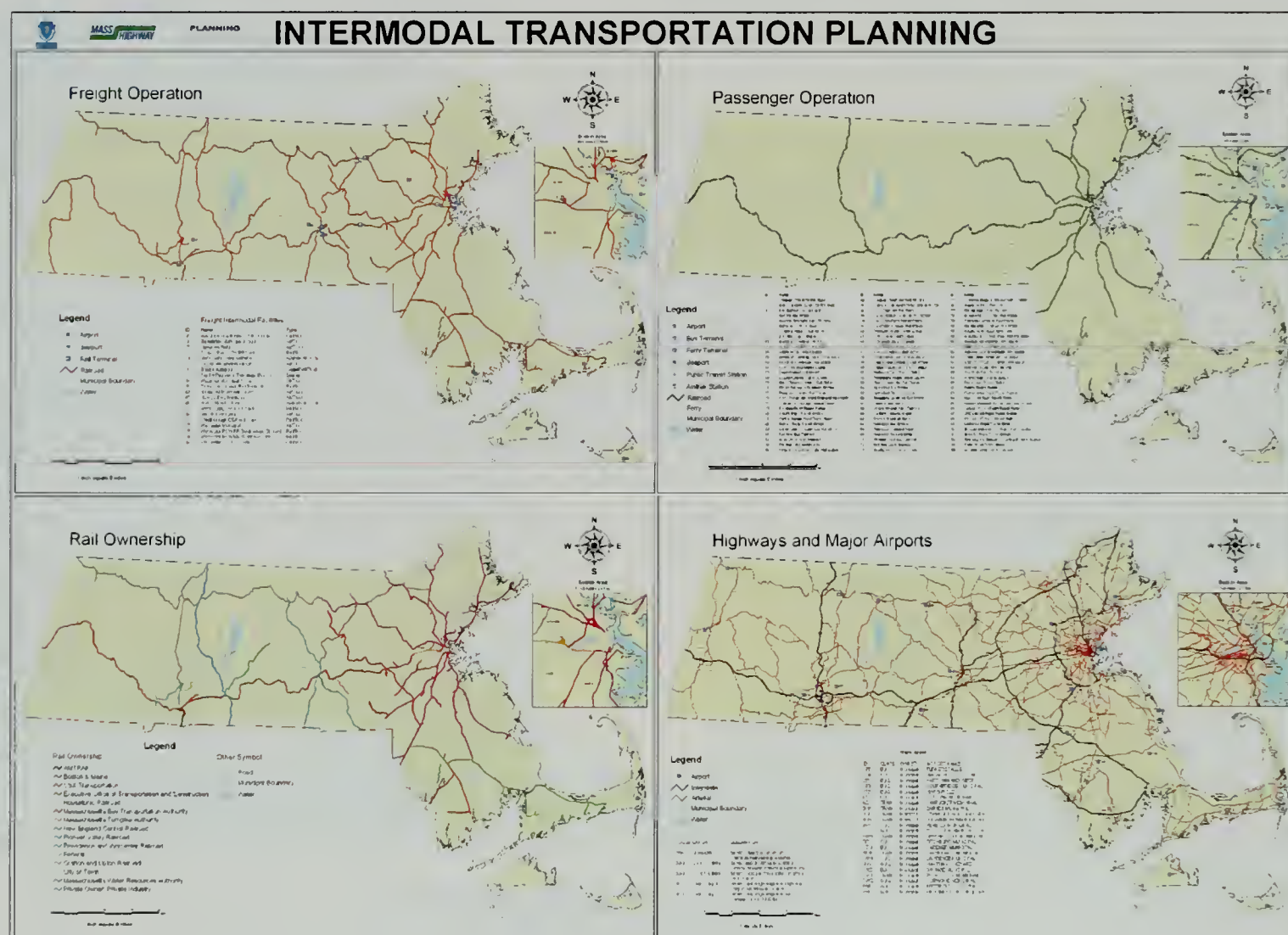
- Major Roadways
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide

Scale

1' = 8 Miles



Intelligent Transportation Systems

current as of November 2003

Description

This map shows the Intelligent Transportation System (ITS) network across the state. Features shown include the active closed circuit TV cameras, dynamic message signs, highways with call boxes, and highways covered by the CARES vans. The closed circuit TV cameras provide the Transportation Operations Center (TOC) with real time views along highways. If a problem occurs along a monitored highway, the TOC staff use the dynamic message sign to warn motorists of downstream highway conditions. The call boxes provide motorists with an emergency telephone in which to contact the TOC for assistance. The CARES vans travel specific highway corridors assisting motorists in repairing or towing broken-down vehicles. Included on the map are a few sample pictures of closed circuit TV camera images, dynamic message signs, and CARES vans.

Other Features Included

- Major Roadways
- Municipal boundaries

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles

COMING SOON

Massachusetts State Plane Coordinate System

current as of November 2003

Description

This map shows Massachusetts 1983 state plane coordinate system referred to North American Datum 1983 (NAD83) Massachusetts Mainland state plane coordinate system. NAD83 is a geographic projection used by Massachusetts agencies that shows Massachusetts based GIS layers as though the equator went through the center of the state, thus flattening and stretching Massachusetts to fill a landscaped page with the state's east-west and north-south centerlines following parallel to the page edge. The map shows the NAD83 grid in feet.

Other Features Included

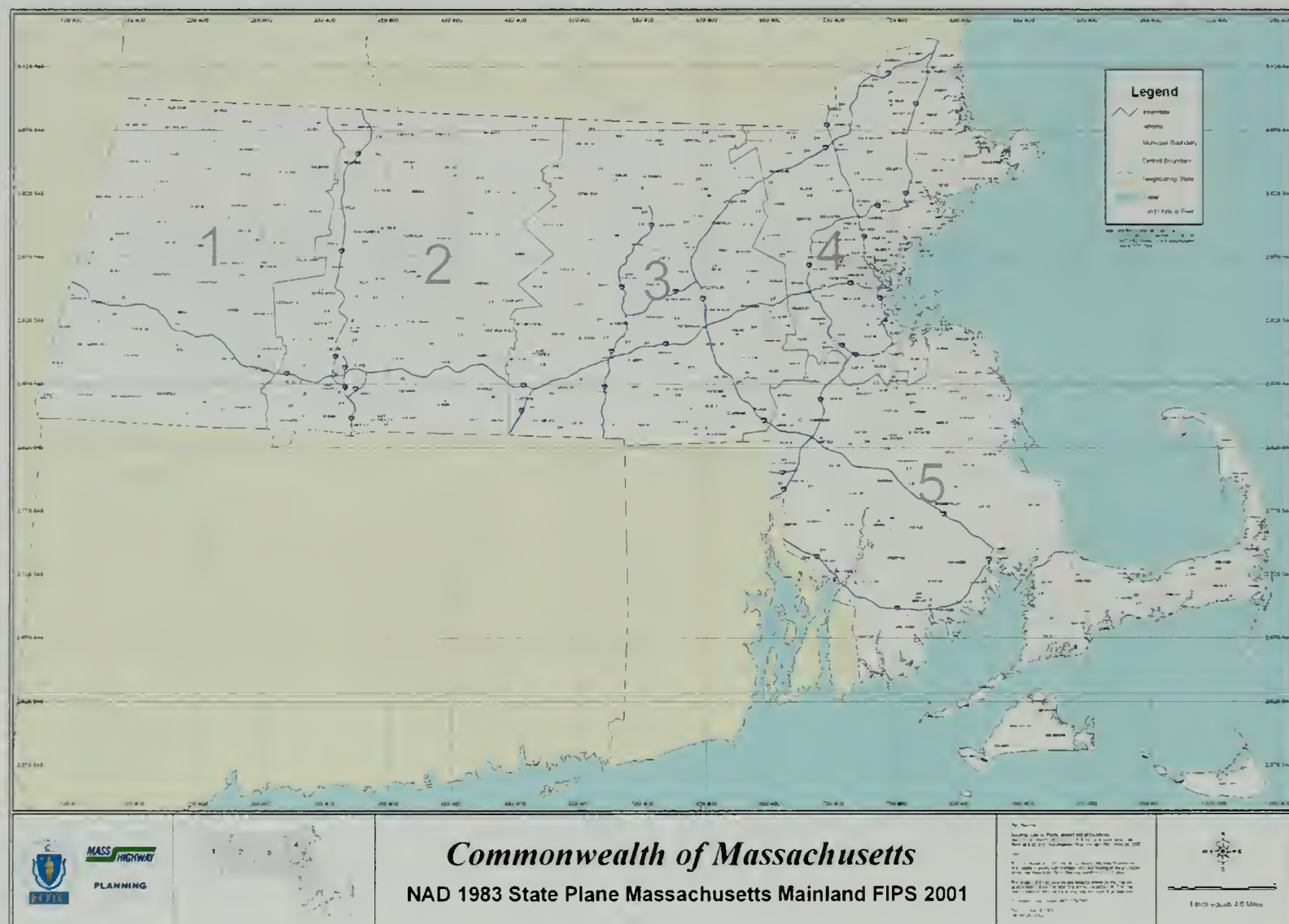
- Major Roadways
- MassHighway Districts

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles



MassHighway Rest Areas

current as of November 2003

Description

This map shows the rest areas located throughout the state owned and maintained by MassHighway. The map highlights rest areas that contain visitor centers, usual located near the state border or in approach to tourist areas such as Cape Cod. In addition, the rest areas are shown on the appropriate side of the road in which they are situated along a highway.

Other Features Included

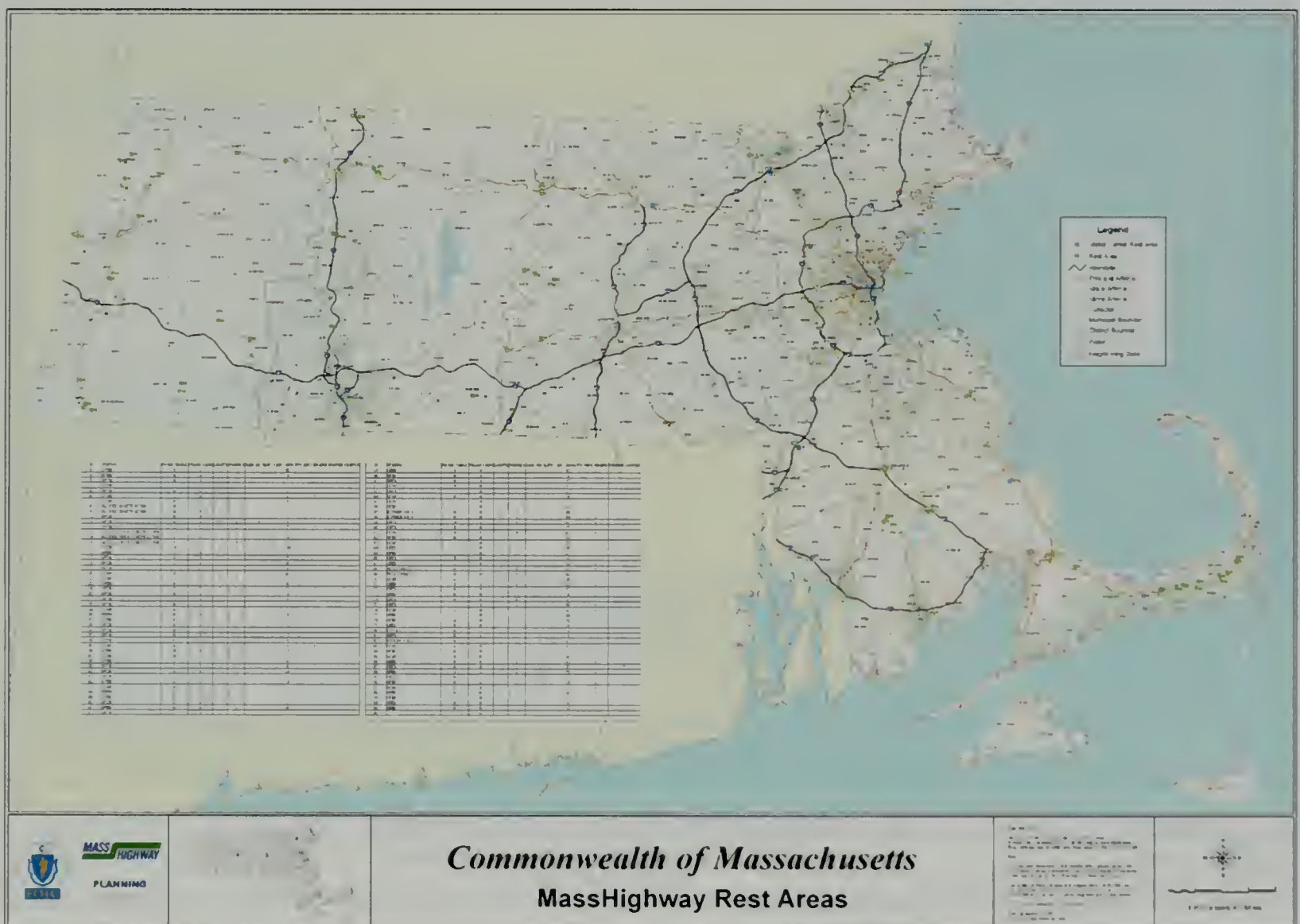
- Major Roadways
- MassHighway District boundaries
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles



EOTC/ MassHighway Bicycle Projects

current as of October 2003

Description

This map shows the bicycle projects located statewide that EOTC/ MassHighway have funded. Projects stages shown include design, construction, and feasibility study. Within each stage, projects could be programmed for funding, in-progress, or completed for design and construction stages, while the feasibility stage only shows completed projects.

Other Features Included

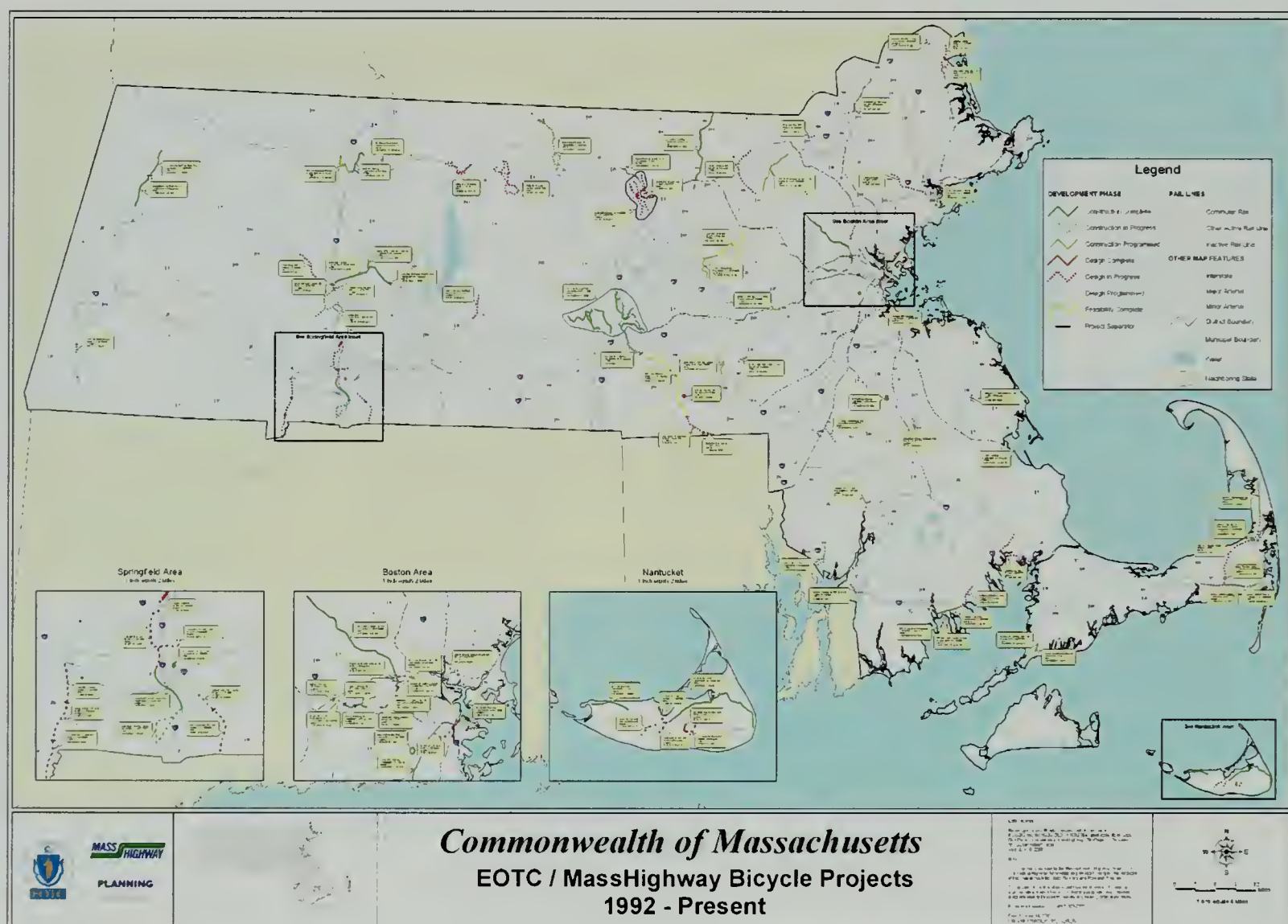
- Major Roadways
- Railroads
- Municipal boundaries
- Ponds and streams

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles



MassHighway Communications Network

current as of November 2003

Description

This map shows the statewide MassHighway communications network. The network includes two technologies, microwave and fiber optics. The microwave network shows the sight paths between towers with the site distance and speed indicated. The fiber optic network shown includes fiber that is existing, proposed, and proposed gaps. Proposed gaps refer to sections of road that should be considered in the future to complete the fiber network.

Other Features Included

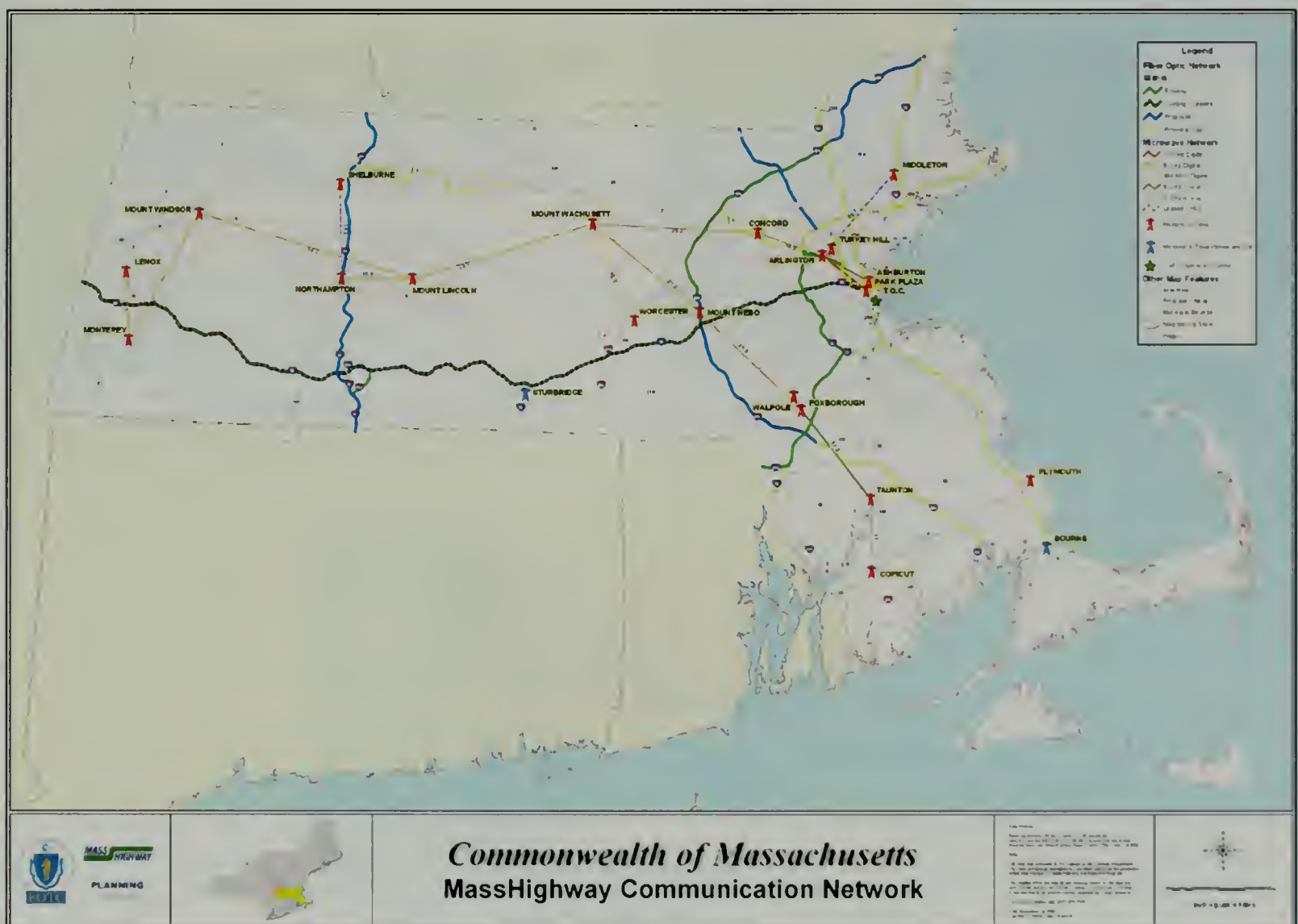
- Major Roadways
- Municipal boundaries

Geographic Areas Available

- Statewide

Scale

1" = 4 Miles



Legislative Boundaries

current as of January 2003

Description

These maps show the boundaries of the State Senatorial, House of Representative and United States Congressional districts. The maps are produced in three sizes: 50" by 36", 36" by 25" and 25" by 18". The legislative districts are coded with a numeric label. The names of the Senators and Representatives are listed with the reference number for the purpose of locating each district on the map. These maps are updated during each new legislative year.

Other Features Included

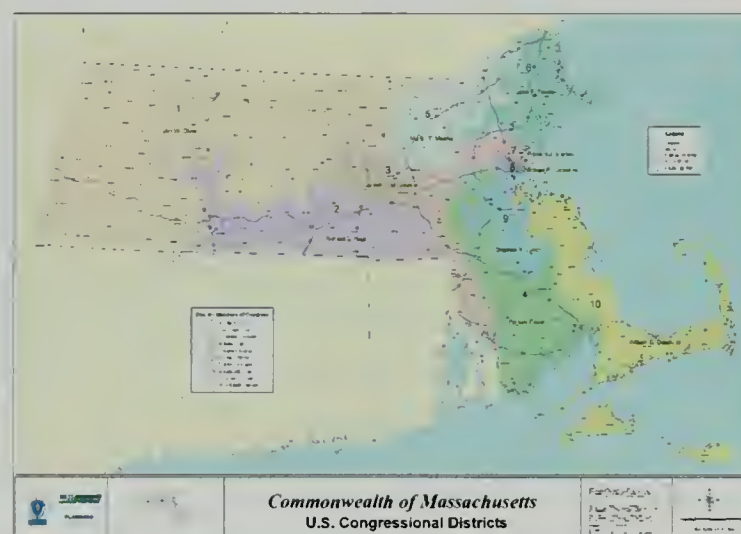
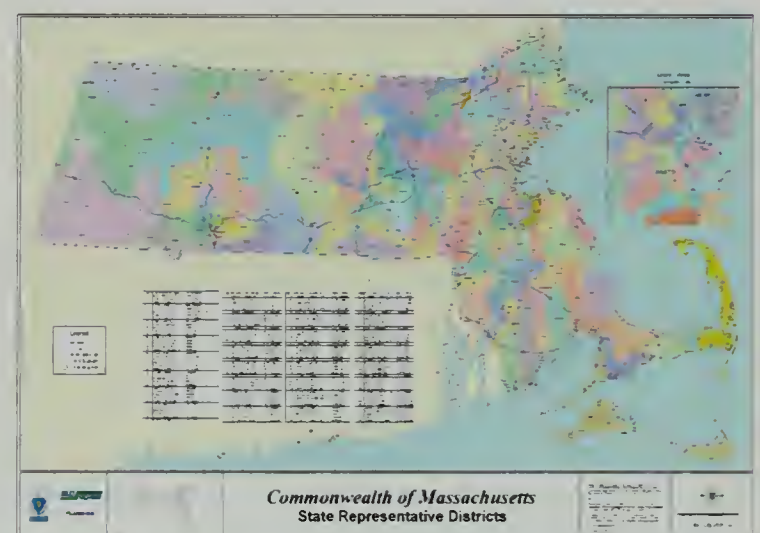
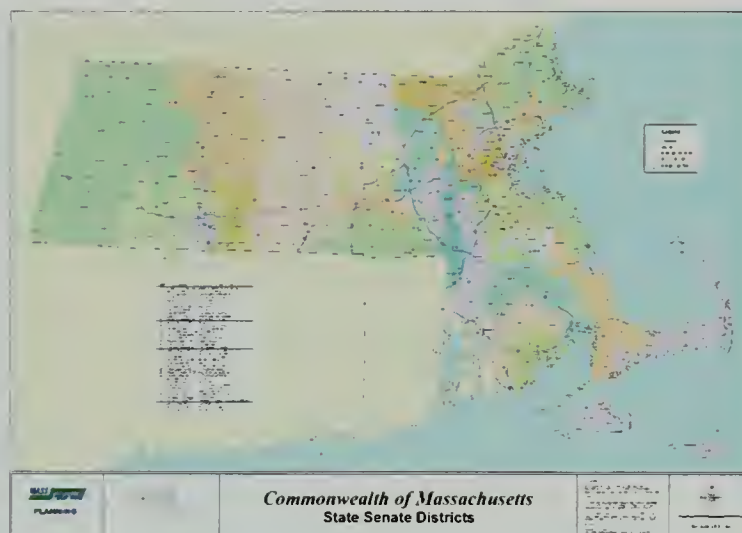
- Major Roadways
- Municipal boundaries

Geographic Areas Available

- Statewide
- MassHighway District

Scale

1 inch = 4 miles
varies by district



DIGITAL DATA

Geographic and tabular transportation data are available in several digital formats.

Road Centerlines – ArcInfo and DXF formats

Description

Coverages for each of the 351 communities and a statewide coverage are available in both standard and exported ArcInfo format. These coverages and the Road Inventory data files are available on CD-ROM, with full documentation. Individual cities and towns are available upon request. DXF format files that contain street names are also available for town level only.

Geographic Areas Available

- Statewide
- Town

Road Inventory Files – ArcInfo, DBF, Excel, ASCII, and hard copy formats

Description

Statewide Road Inventory files, in standard and exported ArcInfo format, and are available on the CD-ROM mentioned above. Individual city and town Road Inventory attribute files and street listings are available in ArcInfo, Excel, DBF, or ASCII format. Hard copy printouts of these files are also available upon request.

Geographic Areas Available

- Statewide
- Town

Appendix A: Data Request Form



TRACKING #: _____

DATA REQUEST FORM

NAME: _____	PHONE: _____
ADDRESS: _____	
E-MAIL ADDRESS (if applicable) _____	

AGENCY

<input type="checkbox"/> EOTC	<input type="checkbox"/> MASSHIGHWAY	<input type="checkbox"/> OTHER STATE AGENCY	<input type="checkbox"/> PRIVATE
DEPARTMENT or COMPANY: _____			

INFORMATION REQUEST

MAP/DATA	_____
GEOGRAPHIC AREA	_____
PAGE:	_____ CATALOG DATE: _____
ADDITIONAL INFORMATION or SPECIAL REQUIREMENTS: _____	
<i>I UNDERSTAND THAT THIS DATA IS INTENDED FOR MY USE ONLY AND NOT TO BE REDISTRIBUTED</i>	
SIGNATURE:	DATE: _____

MASSHIGHWAY PLANNING USE ONLY

RECEIVED BY: _____	DATE: _____
ASSIGNED TO: _____	DATE: _____
DATE COMPLETED: _____	DATE SENT: _____ TIME SPENT: _____

Deliver to: MassHighway Planning, 10 Park Plaza, Room 4150, Boston, MA 02116, Attn: Mark Berger;
 or e-mail to: <mailto:mark.berger@state.ma.us> or fax to 617-973-8035

Appendix B: Attributes of Road Inventory File

MassHighway Planning
Attributes of Road Inventory file

Item Number	Field Name	Description
1	CITY_NUM	City or town number
2	RIN	Road inventory number
3	FRM-ST-NUM	From road inventory number
4	TO-ST-NUM	To road inventory number
5	ADT	Average annual daily traffic (AADT)
6	ADMIN_SYS	Administrative system
7	FEDAID_SYS	National Highway System Status
8	FEDAID-RT-NUM	Federal-Aid route number
9	FEDAID-UR-DESIG	Federal-Aid Urban/Rural designation
10	FUNC-CLASS	Functional Classification
11	AUTO-RT-NUMBER	Auto route number
12	ALT-RT-NUMBER	Alternate route number(s)
13	FAC_TYPE	Facility Type
14	D-SH-WID	Left side right shoulder width for DIVIDED roadway only
15	D-SH-TYP	Left side right shoulder type for DIVIDED roadway only
16	DIV-L-SU-WID	Left side surface width of travel lanes for DIVIDED roadway only
17	MED-WID	Median width for DIVIDED roadway only
18	DIV-L-NUM-TR-LA	Left side number of travel lanes for DIVIDED roadway only
19	CURBS	Curbs
20	L-SW-WID	Left sidewalk width
21	R-SW-WID	Right sidewalk width
22	STREET-OPERATION	Street operation
23	L-SH-WID	Median shoulders width for DIVIDED roadway OR Left shoulder width for UNDIVIDED roadway
24	L-SH-TYP	Median shoulders type for DIVIDED roadway OR Left shoulder type for UNDIVIDED roadway
25	SUR-WID	Right side surface width for DIVIDED roadway OR Entire surface width for UNDIVIDED roadway
26	SUR-TYP	Surface type for either DIVIDED OR UNDIVIDED roadway
27	R-SH-WID	Right side right shoulder width for DIVIDED roadway OR Right shoulder width for UNDIVIDED roadway
28	R-SH-TYP	Right side right shoulder type for DIVIDED roadway OR Right shoulder type for UNDIVIDED roadway
29	UNDIV-RRWY-#TRLA	Right side number of travel lanes for DIVIDED roadway OR Total number of travel lanes for UNDIVIDED roadway
30	ACC_CON	Access control
31	TERRAIN	Terrain
32	STRUCT-COND	Structural condition
33	ROW-WID	Right of way width
34	SPEED_LIMIT	Speed limit
35	ODOM-READ	Cumulative odometer reading (xx.xx)
36	YR-OF-ADT	Year of AADT
37	URB-AREA	Urbanized Area
38	HIPMS-CODE	HIPMS Code
39	AUTO-RT-SIGN	Auto route signing
40	SPECIAL_FUN	Special systems
41	TRUCK_ROUTE	Designated truck route/parkway
42	ADT_DER	AADT derivation
43	MEDIAN_TYPE	Median type for DIVIDED roadway only
44	TYPE_URB_LOC	Urban location
45	TOLL_RD	Toll
46	PAVE_IRI	Pavement roughness (IRI)
47	YR_OF_IRI	Year of IRI
48	PAVE_PSR	Pavement servicability rating (PSR)
49	YR_OF_PSR	Year of PSR
50	RT_LRS_ID	Section Linear Referencing System (LRS) ID
51	RT_LRS_BGMPT	LRS beginning milepoint
52	RT_LRS_ENDMPT	LRS ending milepoint
53	ADT_SOURCE_LOC	AADT count station location number
54	COUNTY-CODE	County code
55	SERIAL_NUMBER	Serial number
56	CSN_II	County code + Serial number (with blanks)
57	CSN_ZF	County code + Serial number (zero filled)
58	CITY_RIN_II	City or town number + Road inventory number (zero filled)
59	MILES	Section Length (with decimals)
60	ODMILE	Cumulative odometer reading (from Item #34 with decimals)
61	STREET_NAME	Street Name
62	FRM-ST-NAME	From Street Name
63	TO-ST-NAME	To Street Name

Appendix C: List of Available GIS Coverages

Available GIS Coverages

I. Transportation

Airport locations
MassHighway Bicycle projects
Bridge locations
Ferry routes
Interchanges
Major intermodal terminal locations
MassHighway Adopt-a-Highway locations
MassHighway construction project locations
MassHighway depot locations
MassHighway traffic count locations
MBTA transit lines and stations
Park-and-ride lots
Railroad lines
Rest areas
Roads
MassHighway Fiber Optic Network
MassHighway Microwave network
MassHighway Work Gangs

II. Boundaries

Massachusetts cities and towns
Massachusetts counties
Massachusetts Senate and House legislative districts
Massachusetts state boundary
Massachusetts urbanized areas and small urban areas
MassHighway Districts and Sub-Districts
Neighborhoods (Boston and Cambridge)
Neighboring states (CT, ME, NH, NY, RI, VT)
Neighboring states' towns
Regional Planning Agencies
Regional Transit Authorities
Registry of Motor Vehicle service regions
State Police barracks locations
U.S. Congressional District boundaries for Massachusetts
ZIP code boundaries

Available GIS Coverages

III. Images

Digital Color Half-Meter Orthophotos
Scanned USGS topographic maps

IV. Land Use and Zoning

1985 land use (all cities and towns, 22 categories)
1991 land use (all cities and towns, 33 categories)
1999 land use (all cities and towns, 33 categories)

Abandoned cranberry bogs
Flood insurance rate maps zones V and AO
Local community zoning (eastern Massachusetts)
Protected and recreational open space
Transmission lines

V. Water

Aquifers
Community and non-community public water supplies
Community interim well head protection areas
EPA sole source aquifers
Groundwater discharge points
Interim well head protection areas
Major basins
Orthophoto wetlands map theme
Outstanding resource waters
Ponds
Stream gauging stations
Sub-basins
Surface water supply protection areas
Wetlands and streams (1:5,000 orthophoto)

Available GIS Coverages

VI. Environment

Anadromous fish
Areas of Critical Environmental Concern
Barrier beaches (state designated)
Certified vernal pools
Coastal barrier resource units
DEP permitted solid waste facilities
DEP-approved Zone IIs
DEP tier classified Chapter 21E sites
DEP Bureau of Waste Prevention major facilities
Designated shellfish growing areas
Estimated habitats of rare wildlife
Hydrography
Insect infestation
Massachusetts coastal zone
Massachusetts Resources Identification Project contiguous natural lands
MRIP riparian corridors
MRIP natural land riparian corridors
Natural Heritage and Endangered Species Program priority sites
Shellfish sampling stations
Soils (Hampden/Hampshire West)
Stellwagen Bank Natural Marine Sanctuary

VII. Geology and Hypsography

Surficial geography
Three-meter contours (1:5,000 orthophoto)

VIII. Other

Massachusetts Courts

